

ABSTRACT

A seal usable in a turbine engine for sealing a high pressure gas region from a low pressure gas region. The seal seals gaps between a rotatable body and a stationary body by creating forces opposing flow from the high pressure region to the low pressure region. During turbine engine operation, the seal creates aerodynamic forces that substantially prevents leakage of gases from a high pressure region to a low pressure region. The seal may be formed from a plurality of blades aligned in one or more rows and extending from a rotatable body towards a stationary body of the turbine engine to be in close proximity to the stationary body. The seal may also include a plurality of blades aligned in one or more rows and extending from the stationary body towards the rotatable body to be within close proximity of a surface of the rotatable body.